



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,582	11/29/2001	Donald F. Albert	AAC/2	6236
1473	7590	12/15/2003	EXAMINER	
FISH & NEAVE			CHANG, VICTOR S	
1251 AVENUE OF THE AMERICAS			ART UNIT	
50TH FLOOR			PAPER NUMBER	
NEW YORK, NY 10020-1105			1771	

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/997,582	ALBERT ET AL.	
	Examiner	Art Unit	
	Victor S Chang	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 051503. 6) ☐ Other: _____

DETAILED ACTION

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 10/10/2003. Applicants' amendments to the specification, claims 2 and 3, and cancellation of claims 24-37 have all been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

Response to Amendment

4. Claims 1-5 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. (US 5827385) either taken individually, or in view of Izu et al. (US 5670224), substantially for the reasons set forth in sections 9 and 11 of Paper No. 5, together with the additional observations as set forth above, and the following additional reasoning.

With respect to Applicants' response arguing that "Meyer does not disclose an insulated barrier containing a core material formed *in situ*" (Remarks, page 9, second paragraph), the Examiner notes that the recitation "core material formed *in situ*" is believed to be a conventional method limitation which has not been shown on the record to produce a patentably distinct article, as such the formed articles are rendered *prima facie* obvious. It should be noted that product-by-process claims are product claims and that to be limiting in a product claim, a process limitation must be evidenced

as effecting the structure or chemistry of the resultant product over the prior art.

Further, the burden of proof for this showing is on Applicant after the Examiner presents an otherwise *prima facie* rejection. See MPEP § 2113. As such, for claims 1 and 5, since Meyer teaches all the elements of the instantly claimed invention, Applicants must provide evidentiary support that "core material formed *in situ*" effects the structure or chemistry of the resultant product.

With respect to Applicants' arguments that "core material formed *in situ*" provides additional advantageous such as "conform to the shape", "bond to the walls of the barrier", and "increased insulation" (Remarks, pages 9-10), the Examiner must first note that objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value. See MPEP § 716.01(a). Particularly in view of Applicants' arguments that "paneled insulation media ... taught in Meyer, would not be suitable for small or irregularly formed application" and "attempting to fill a barrier with a pre-formed powdered insulation media, such as silica powder taught in Meyer, will result in gaps at points along the walls of the barriers that are larger than the porosity of the powder itself" appear inconsistent and confusing, i.e., Applicants clearly acknowledge that Meyer's teaching including filling the barrier space with silica powder, not just limited formed panel, and why a free flowing powder would leave gaps along the walls has not been substantiated by Applicants' argument.

Additionally, even if "core material formed *in situ*" provides unexpected advantages over Meyer's prior art, the Examiner repeats that it is believed that "core material formed *in situ*" is a conventional method step. Note also as evidence of the

state of the art Beauquin (US 5858489) which is directed to a thermal insulation system, and Beauquin teaches that forming aerogel *in situ* avoids the fragility during transport of prefabricated aerogel elements, and furthermore in the inflexibility of these products, which reduces their capacity to match efficiently the shape of the space which is intended for them (column 5, lines 45-51). As such, it would have been obvious to one of ordinary skill in the art of thermal insulation to modify Meyer's process, and forming the aerogel *in situ*, as taught by Beauquin, motivated by the desire to reduce the fragility problem (e.g., cracking) of the aerogel and a better match in shape to the space to be filled.

With respect to newly amended claims 2 and 3, which now recite that the core material is formed *in situ* within the sealed structure, it is noted that the newly cited state of the art reference by Beauquin renders obvious the amended claims 2 and 3, as set forth above.

With respect to Applicants' argument that "Meyer also teaches placing the shell and a pre-formed insulation media within a mold to manufacture the insulation barrier ... Meyer teaches away from an insulated barrier wherein the core material is formed *in situ*" (Remarks, page 11, first full paragraph), the Examiner repeats (see Paper 5, page 4) that Meyer expressly teaches that the formed shells define a cavity which is filled with an insulation media such as an open cell rigid foam material or a dry silica powder, Applicants' argument to the contrary notwithstanding. Note also that Meyer's teaching of the steps of manufacturing clearly show that after the shell is formed, the cavity is

filled with an insulation media, then evacuating the cavity thereby removing substantially all of the air from the insulation media (column 6, lines 3-17).

5. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. (US 5827385) in view of Applicants' admitted prior art, substantially for the reasons set forth in section 12 of Paper No. 5, together with the additional observations as set forth above.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

Application/Control Number: 09/997,582

Page 6

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP 1800
1700

Daniel Zinker